

HYDE (J. W.)

ON THE NECESSITY OF AMPUTATION OF
THE CERVIX UTERI IN A CERTAIN
CLASS OF CASES OF LACERATION.

BY J. W. HYDE, M.D.,

Consulting Obstetrician to the Long Island College
Hospital; Obstetric Surgeon to St. Mary's
Hospital; Member of the Brooklyn
Gynecological Society.

Reprinted from
THE BROOKLYN MEDICAL JOURNAL,
February, 1893.

NEW YORK:
M. J. ROONEY, PRINTER AND PUBLISHER,
114-120 W. 30th St.





ON THE NECESSITY OF AMPUTATION OF THE CERVIX
UTERI IN A CERTAIN CLASS OF CASES OF
LACERATION.

BY J. W. HYDE, M.D.,

Consulting Obstetrician to the Long Island College Hospital ; Obstetric Surgeon to St. Mary's
Hospital ; Member of the Brooklyn Gynæcological Society.

Read before the Brooklyn Gynæcological Society, October 7, 1892.

This paper is not offered as an attempt to prove that amputation is a superior method of procedure to trachelorrhaphy in all cases of injury; or disease consequent upon injury of the cervix, for many cases of trachelorrhaphy in my own practice, as well as in the hands of other operators, would disprove this. Emmet's operation, from the moment of its inception, has been incontestably the best in the great majority of these cases; gynæcologists all over the world have acknowledged this. But this paper is offered to show

¹ Traité Experimental et Clinique de la Régénération des Os. Par L. Ollier, chirurgien de l'Hotel Dieu, Lyons.

that sometimes there may be a just discrimination made in the choice of methods by which we seek to relieve the prolonged distress and wretchedness incident to the injuries of parturition.

Trachelorrhaphy and amputation of the cervix are not rival operations in the field of gynæcology, as might be inferred by a casual reader of medical polemics; but on the contrary, each one enjoys a definite and exclusive range of usefulness, and cannot be replaced by the other without detriment to the patient. Trachelorrhaphy is well established, thanks to the ingenuity, perseverance and commanding personality of Dr. Emmet. It aims to restore a lacerated cervix to a normal state and function. Amputation of the cervix by galvano-cautery, *for malignant disease*, is well established, thanks to the ingenuity, perseverance and commanding personality of the distinguished president of the American Gynæcological Society, Dr. Byrne. But the necessity of amputation by galvano-cautery—and that exclusively—for relief in certain cases of laceration, does not yet seem to be acknowledged in the teachings and practice of gynæcology.

If we consider the average length of time which has elapsed before this class of cases present themselves for treatment, we find, that in cities, it is over three years, and in the country, four to five years; and in many cases they suffer three times such a period of time before a rational method of relief is obtained, thus giving the injury time to work its worst on the normal structure.

In some constitutions disease attacks an injured part more readily than in others; consequently, there can be no limit of time when the injured cervix may not be invaded with permanent disease, and when once this disease, whatever its nature, has established itself in the cervix, we are often surprised at the multiplicity and the gravity of its reflexes.

I refer in this paper exclusively to cases of long standing, where the normal structure has become pathological in its character, both superficial and deep; where the glandular structure, the mucosa, the deep follicles, and especially the area adjacent to cicatricial growths, has become involved to such an extent as to render improbable any return to their proper or normal function. Such cases might be cured by Emmet's operation, if treated early enough; that is to say, if the operation were performed before extensive, deep-seated degenerative changes have taken place in the cervix. It is conceded that some of the cases which I am about to present might have been benefited by Emmet's operation, and undoubtedly would have been, still, after the repair, much diseased structure would remain, and this would be in itself sufficient to keep up

much of the former pain and nervous distress. Those who have operated for cervical diseases for many years, will doubtless bear in mind cases, where the work of repair had, from its apparent perfection, seemed to be successful, but weeks and months brought little or no comfort to their patients. We know that it is absolutely necessary to success in trachelorrhaphy to remove all of the cicatricial tissue, when the sides of the tear are reformed and coapted. This is pathological tissue. Then in cases of long standing, and with more serious and extensive pathological conditions, why should we not remove all that is diseased? Why repair the laceration only? There is no more danger in one operation than in the other. I can say that I have never had the slightest unpleasant complication following an amputation of the cervix, but I can hardly speak so well regarding some of my cases of trachelorrhaphy. Especially, I desire to say, that the apprehension so often expressed that the stenosis of the canal might result from amputation of the cervix by galvano-cautery, could not be based on any facts that have come to my knowledge. With an experience of some dozens of cases, I have never met with a case of stenosis following amputation by cautery; and I am inclined to believe that such apprehensions are based mainly, if not entirely, on theoretical considerations. The theory itself may be faulty. Why should not an annular cicatrix, resting on a fixed bed, so to speak, contract in such a way as to pull its inner border, which is the mucosa of the canal, outward, as much as it pulls the outer border inward?

All of my cervical amputations have been performed with the galvano-cautery with one exception, and this was performed with the scissors. This particular case did well enough so far as the operation was concerned, but the patient was the longest in her return of health. I am satisfied that there is a special value in electric action outside the mere removal of so much diseased tissue. Every one of the five cases reported in this paper was accompanied with subinvolution, and two of them to a marked degree, so much so as to excite suspicion of the presence of tumors. With the recovery of these cases, the subinvolution had vanished in every one of them; so had much pelvic tenderness, due probably to overweighted ligaments or sympathetic congestions. I believe the galvano-cautery was a potent factor in the production of such good results. Possibly it stimulates the local glandular system, and contracts the blood-vessels and muscles to a degree that does not usually follow a knife operation.

"Carl Braun has shown that after amputation of the cervix for hypertrophy the uterus sometimes undergoes changes which re-

semble those which occur physiologically in the puerperal uterus."

"Martin, of Berlin, strongly recommends amputation of the cervix. In a paper read before the German Scientific Association, at Cassel, he gives the result of the operation in seventy-two (72) cases, in all of which, the uterus was stimulated to undergo involution." (Hart and Barbour.)

In an article bearing on this subject, Dr. Byrne says: Amputation by the galvano-cautery is in itself a powerful factor in inducing rapid and certain involution, a process which amputation by the scissors or other means rarely accomplishes.

While the local or pelvic conditions are thus benefited, I cannot fail to note also, how in conjunction with these local reliefs, the dreadful neuralgias, the angina, the basic brain-trouble, the dyspepsia and insomnia all vanish.

I submit herewith the histories of a few of my cases which bear directly on the subject under discussion.

CASE I.—Mrs. F. E., age forty, married. III.-para, Has suffered seventeen years with various forms of reflex neuroses. Asthma was among the earlier of these, then gastralgia, cardialgia and cephalalgia. It was seldom that she was free from some form of distress; for the last seven years the difficulty seemed to have centred mainly at the base of the brain, from which the pain radiated sometimes to the top of her head, then down her back. She often lay for days in a large easy chair with her head drawn back between the elevated shoulder blades. She was subject to attacks of excruciating uterine colic, also menorrhagia and insomnia. Naturally of a lively and cheerful temperament she had become silent and morose. Able specialists from half a dozen of the larger cities of the country had pronounced upon her case. To one it was a heart difficulty. To another it was a brain difficulty, with insanity in the near future. To another it was rheumatism. To another it was ulceration of the rectum. In no instance was she relieved for any considerable period; on the contrary, her long, weary years of suffering had necessitated the use of morphia to such an extent as to threaten this as a permanent habit.

I was called to the case in November, 1887. Examination revealed a deep laceration of the left side of the cervix, with cystic hypertrophy: depth of uterus four inches; diameter of cervix one-and-a-half inches, hard, nodular feel. Pressure upon the deep cicatrix instantly produced the dreadful pain at the base of the brain, and also nausea. With so much cervical disease I did not think a trachelorrhaphy would give more than a partial relief and I therefore advised amputation of the entire cervix, which was per-

formed a week later with the galvano-cautery. The uterus was drawn down and with a bistoury an incision was made on a line with and as near the utero-vaginal junction as possible, in which the cautery loop was sunk, when, with a slow heat and with constant traction, the deep cervical structure was removed. With the object of the entire removal of all the diseased tissues, I passed a suitable electrode up to a point just without the internal os, and cooked the tissue thoroughly, hoping to obtain a slough, as I did, of the remaining cicatrix.

The results were happy in the extreme: she has never since had any of her dreadful pains, either in her head, or heart, or uterus. The uterus is reduced to one-half its former size, menstruation is normal. There is no stenosis. The proctitis excited by her disease has ceased. Instead of being gloomy and morose she is happy and cheerful. Instead of seclusion for months at a time from all her friends, she now presides again over her household affairs, entertains without special fatigue, and has traveled all over the country.

CASE II.—Mrs. M. D., widow, thirty-four, American. *ii.*-para, first seen by me April, 1887. She is a lady of eminent culture and refinement; of a highly neurotic temperament; has been since the birth of her first child a chronic sufferer from headache, palpitation and difficulties referable to the digestive apparatus, all of which have increased since the birth of her last child, eight years ago. She had been under treatment both in this country and in Europe for uterine trouble, as well as for general nervous and mental disturbances. Argument could not dispel from her the belief that she would ultimately become insane. Her wretchedness was complete. She was willing to submit to any operation, however serious, that promised relief.

Examination showed subinvolution of the uterus with a cervix of more than double the usual size, and a triple laceration, deepest on the left side, together with cystic disease and sensitive cicatricial tissue, with hyperplasia uniform. The conditions attending this case were so grave as to demand prompt and positive measures. I explained to herself and friends that amputation of all the diseased structure would promise greater certainty of relief than any other measure, and this was acceded to cheerfully. As soon as practicable I removed with the cautery loop as much as possible of the cervix, following this up by a free use of the cautery within the cervical canal for the destruction of any remaining scar tissue. The result was most satisfactory. The first time I saw her after the operation, she said she was certain I had accomplished the

longed-for good result; that her head had not felt so clear, nor her nerves so free from tension and pain in years.

This patient went on to an uninterrupted recovery, every feature of her former ailments being either essentially relieved or altogether cured. She married again about two years ago, and a communication from her states that she is well and happy.

CASE III.—Mrs. C. W., German, thirty-six years, married. II.-para. At the birth of her first child twelve years previously, a severe bi-lateral laceration of the cervix occurred, involving the deeper structures on both sides. She informs me that she has had frequent headaches ever since, accompanied with such nausea as compelled absolute rest in bed, often for three days at a time. In the interim she had miscarried eight times. Her condition when I first saw her was deplorable. Her neuralgia was more or less constant. She was afflicted with loss of appetite, insomnia and inability to walk even one block.

Examination revealed the deep lacerations with large amount of cicatricial induration and ectropion. There was also a chronic endometritis. I advised, in this case, the usual operation of trachelorrhaphy, believing it would afford the desired relief. This operation was performed in May, 1885, taking great care to remove with the scalpel all the deep cicatricial tissue and considerable of the adjacent indurated tissue. The result, so far as the operation was concerned, was one of the most satisfactory of any that I have had in this class of cases; the union was complete throughout and perfect. Her improvement was very slow. Her menorrhagia was much benefited; there was less headache and nausea and more sleep, but there was only partial benefit as to the subinvolution and cervical induration. She became pregnant eight months after the operation and passed through the period of gestation ordinarily well, giving birth to an eleven-pound boy. The cervix yielded again on the left side, in the line of union, but not to any considerable extent. Later on her old troubles returned with much of their former force, making her an invalid for much of the time. Amputation of the cervix was now advised in preference to another trachelorrhaphy, with the hope of permanent relief, by the removal of all the diseased tissues. This was performed in October, 1890, and in the same manner as mentioned in the previous cases, with the galvano-cautery. In every material way it has been a success, removing the causes of reflex irritation, producing involution, and permitting a general restoration to health.

CASE IV.—Mrs. S. E. M., thirty-six years, American. IV.-para. Since the birth of her third child seven years ago,

she had been invalided the greater part of the time. She had headaches, insomnia, menorrhagia, weakness in the legs, so that she had not been out of her house for months; and what alarmed herself and friends more particularly, was the frequent attacks of angina with which she was afflicted. The disease in this instance was similar to that indicated in some of the other cases. There was a history of laceration, followed by the formation of cicatricial tissue and deep cervical disease. There was also marked subinvolution. The angina was the most immediately necessary ailment to overcome.

In other cases where I had operated by trachelorrhaphy, I had observed that the angina did not always abate altogether, and when it did, it was slow, taking some months before a material improvement occurred; therefore a complete removal of all the diseased cervical structure was decided upon. The operation was performed in September, 1890. I operated with the scissors, as the patient was remote from the city, and on account of the inconvenience of carrying a battery so far. The patient made an ultimate good recovery. The angina appeared in a milder form two or three times afterwards, since which there has been no return of this symptom. The general physical condition was slow in its improvement, as compared with cases operated upon by the cautery, nearly a year having elapsed before she had regained her strength to such a degree as to be able to resume her household duties in full. This case is referred to for the purpose of demonstrating that operations upon the cervix with scissors are inferior in their results to those performed by cautery methods.

CASE V.—Mrs. A. O. S., widow, American, thirty-nine. iv.-para. Youngest child was six years of age.

She had suffered many years with uterine troubles, accompanied with headache and gastric disorders; also, at times, she was subject to some mental hallucinations. Three years prior to coming under my care she had a severe headache for some days, terminating in a hemiplegic attack lasting many weeks. Still later, she was considered mentally unbalanced, and at one time was confined in an institution in St. Louis for a period of three or four months. She was thin, anæmic, nervous, sleepless.

Examination revealed some cicatricial tissue in an unusually large and indurated cervix, which was sensitive to almost any manipulation, however delicate, and, indeed, the whole uterine and ovarian structure seemed involved in a hyperæsthesia. Local treatment continued for many months availed nothing in this case. It became absolutely necessary to relieve her, if possible, of a dif-

ficulty which threatened a permanent insanity. As it was not possible that she would ever marry again,¹ I advised the amputation of the cervix uteri. She willingly acceded to any proposition for her relief, and with some doubts in my mind, at the time, as to the practical results to be obtained in this case I operated. The cervix was drawn down firmly and the line of intended separation marked with a bistoury. Into this line the loop of platinum was adjusted and the entire portio vaginalis removed by the cautery.

The transformation in this patient was a most gratifying surprise. In every physical respect she improved. Her mental condition has kept pace with her physical. She has gained forty pounds in weight and is a healthy woman.

These are a few of the most interesting cases of this class, which I find in my note-book. It is to be noted in all these cases, which are typical, at least so far as my experience goes, that the cerebral symptoms are as characteristic as they are alarming.

I was amazed to read in the *American System of Gynæcology*, presenting itself as "the leading authority on its subject," this carefully written dictum from the facile pen of my friend, Dr. Grandin: "Pain in the head can scarcely lay claim to a place in the symptomatology of disease of the pelvic organs, unless it be on account of the frequency with which women complain of it."²

I cannot doubt that in the next edition of this great work, we shall find that Dr. Grandin's widened experience had led him to modify the above dictum very materially.

To conclude :

1. In cases where the injury is recent, and the constitution of the patient is so good, that no extensive degenerations have occurred, in short, where there is a reasonable probability of being able to restore the cervix to a normal condition, this should be done by Emmet's operation.

2. In old cases, where extensive alterations have taken place, as proved by direct examination, and not less certainly by the unmistakable and intractable reflexes that attend such alterations, the unbearable headaches usually referred to the vertex and the nuchal region, the gastric disturbances, and the endless procession of psychic, neurotic, motor, cardiac and respiratory aberrations, so familiar to every experienced physician, in such cases trachelorrhaphy is out of the question. To remove all the diseased tissues,

¹ Subsequent experience has convinced me that I was needlessly scrupulous in this respect. As a matter of fact, if she had wished to marry, the operation would have been an indisputable preliminary.

² (Grandin, *Am. Syst. Gynæc.* i. 290.)

and that alone, would call for an unattainable amount of nicety of dissection; and supposing the dissection accomplished, the sewing up of what was left might result in a most interesting thing "of shreds and patches," but it would not be a cervix uteri—which is the only legitimate object of trachelorrhaphy. In such cases, amputation is as effective clinically, as it is logical in theory.

3. Amputation of the cervix for disease, affords the best results when performed by the galvano-cautery.

4. The operation is not more dangerous than trachelorrhaphy.

5. It is not likely to be followed by stenosis of the canal.

6. There is nothing in the operation that seriously militates against conception, or a normal gestation and delivery.

In September, 1887, I saw M. S., pluripara, aged thirty-six. She had what appeared to be a well marked cancerous growth, limited to the cervix. On September 28, 1887, the entire cervix was removed by galvano-cautery, and the tumor when subsequently examined by a competent pathologist proved to be epithelioma. On March 7, 1889—that is to say eighteen months after complete amputation of the portio vaginalis by galvano-cautery, Mrs. S., gave birth to a large, healthy child; and she is now, at the age of forty-one, in the enjoyment of good health.

